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# Handbook of **INDUSTRIAL** **SURFACTANTS**

An International Guide to More Than 16,000 Products  
by Tradename, Application, Composition & Manufacturer

Compiled by  
Michael and Irene Ash

Gower

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- foam 15 mm (0.1% aq., initial); toxicology: severe eye irritant; LD50 (oral, rat) 1.98 g/kg; 100% act.
- Igepal® CO-610. [Rhône-Poulenc Surf.; Rhône-Poulenc France] Nonoxynol-8 (7-8 EO); CAS 9016-45-9; nonionic; low foaming detergent, wetting agent, emulsifier, lubricant; for metalworking; biodeg.; FDA compliance; pale yel. liq., aromatic odor; sol. in naphtha, xylene, butyl Cellosolve, perchloroethylene, ethanol, water; sp.gr. 1.05; visc. 230-290 cps; HLB 12.2; cloud pt. 72-82 F (1%); flash pt. > 200 F (PMCC); pour pt. 37 ± 2 F; surf. tens. 30 dynes/cm (0.01%); Ross-Miles foam 55 mm (0.1% aq., initial); 100% act.
- Igepal® CO-620. [Rhône-Poulenc Surf.] Nonoxynol-8 (8.5 EO); CAS 9016-45-9; nonionic; detergent, wetting agent, emulsifier; surfactant used in heavy-duty liq. detergent compds.; biodeg.; FDA compliance; pale yel. liq., aromatic odor; sol. in water, xylene, dibutyl phthalate, perchloroethylene, ethanol, ethylene glycol; sp.gr. 1.05; visc. 180-280 cps; solid. pt. 31 F; HLB 12.6; pour pt. 36 F; cloud pt. 104-115 F (1% aq.); flash pt. (PMCC) > 200 F; surf. tens. 32 dynes/cm (0.01%); Ross-Miles foam 69 mm (0.1% aq., initial); 100% conc. DISCONTINUED.
- Igepal® CO-630. [Rhône-Poulenc Surf.; Rhône-Poulenc France] Nonoxynol-9; CAS 9016-45-9; nonionic; detergent, wetting and rewetting agent, corrosion inhibitor, penetrant, emulsifier, dispersant for textile, paper, leather, household/industrial cleaners, agric., paints, metal processing, emulsion cleaning; biodeg.; FDA, EPA compliance; almost colorless liq., aromatic odor; sol. in naphtha, xylene, butyl Cellosolve, perchloroethylene, ethanol, water; sp.gr. 1.06; visc. 225-300 cps; HLB 13.0; cloud pt. 126-133 F (1%); flash pt. > 200 F (PMCC); pour pt. 31 ± 2 F; surf. tens. 31 dynes/cm (0.01%); Ross-Miles foam 80 mm (0.1% aq., initial); toxicology: severe eye irritant; LD50 (oral, rat) 3 g/kg; 100% act.
- Igepal® CO-660. [Rhône-Poulenc Surf.; Rhône-Poulenc France] Nonoxynol-10; CAS 9016-45-9; nonionic; detergent, wetting and rewetting agent, corrosion inhibitor, penetrant, emulsifier for textile, paper, leather, household/industrial cleaners, agric., paints, metal processing, emulsion cleaning; biodeg.; FDA, EPA compliance; pale yel. liq., aromatic odor; sol. in naphtha, xylene, butyl Cellosolve, perchloroethylene, ethanol, water; sp.gr. 1.06; visc. 225-275 cps; HLB 13.2; cloud pt. 146-149 F (1%); flash pt. > 200 F (PMCC); pour pt. 45 ± 2 F; surf. tens. 31 dynes/cm (0.01%); Ross-Miles foam 82 mm (0.1% aq., initial); 100% act.
- Igepal® CO-710. [Rhône-Poulenc Surf.; Rhône-Poulenc France] Nonoxynol-10.5; CAS 9016-45-9; nonionic; detergent, wetting and rewetting agent, corrosion inhibitor, penetrant, emulsifier for textile, paper, leather, household/industrial cleaners, agric., paints, metal processing, emulsion cleaning; biodeg.; FDA, EPA compliance; pale yel. liq., aromatic odor; sol. in naphtha, xylene, butyl Cellosolve, perchloroethylene, ethanol, water; sp.gr. 1.06; visc. 240-300 cps; HLB 13.6; cloud pt. 158-165 F (1%); flash pt. > 200 F (PMCC); pour pt. 49 ± 2 F; surf. tens. 32 dynes/cm (0.01%); Ross-Miles foam 110 mm (0.1% aq., initial); 100% act.
- Igepal® CO-720. [Rhône-Poulenc Surf.; Rhône-Poulenc France] Nonoxynol-12; CAS 9016-45-9; nonionic; detergent, wetting and rewetting agent, corrosion inhibitor, penetrant, emulsifier, dispersant for textile, paper, leather, household/industrial

cleaners, agric., paints, metal processing, emulsion cleaning; biodeg.; FDA, EPA compliance; opaque liq., aromatic odor; sol. in naphtha, xylene, butyl Cellosolve, perchloroethylene, ethanol, water; sp.gr. 1.06; visc. 260-340 cps; HLB 14.2; flash pt. > 200 F (PMCC); pour pt. 62 ± 2 F; surf. tens. 34 dynes/cm (0.01%); Ross-Miles foam 110 mm (0.1% aq., initial); toxicology: severe eye irritant; LD50 (oral, rat) > 1.5 g/kg; 100% act.

- Igepal® CO-730. [Rhône-Poulenc Surf.; Rhône-Poulenc France] Nonoxynol-15; CAS 9016-45-9; nonionic; detergent, dispersant, wetting agent, penetrant, emulsifier for industrial cleaners, metalworking fluids, agric. formulations; effective at high temps. and in high electrolyte media; biodeg.; FDA, EPA compliance; yel. liq., aromatic odor; sol. in naphtha, xylene, butyl Cellosolve, perchloroethylene, ethanol, water; sp.gr. 1.07; visc. 450-550 cps; HLB 15.0; cloud pt. 203-212 F (1%); flash pt. > 200 F (PMCC); pour pt. 71 ± 2 F; surf. tens. 36 dynes/cm (0.01%); Ross-Miles foam 130 mm (0.1% aq., initial); toxicology: moderate eye irritant; LD50 (oral, rat) 2.5 g/kg; 100% act.

- Igepal® CO-738. [Rhône-Poulenc Surf.] Nonoxynol-15; CAS 9016-45-9; nonionic; detergent, dispersant, wetting agent, penetrant, emulsifier for industrial cleaners; liq.; HLB 15.0; 80% act. DISCONTINUED.

- Igepal® CO-830. [Rhône-Poulenc Surf.; Rhône-Poulenc France] Nonoxynol-20; CAS 9016-45-9; nonionic; detergent, wetting agent, dispersant, emulsifier, for industrial cleaners, metalworking fluids, polyester resins; latex stabilizer; demulsifier for crude petrol. oil emulsions; glass mold release agent; FDA compliance; pale yel. wax; aromatic odor; sol. in naphtha, xylene, butyl Cellosolve, perchloroethylene, ethanol, water; sp.gr. 1.08 (50°C); HLB 16.0; cloud pt. > 212 F (1% aq.); flash pt. > 200 F (PMCC); pour pt. 91 ± 2 F; surf. tens. 39 dynes/cm (0.01%); Ross-Miles foam 120 mm (0.1% aq., initial); 100% act.

- Igepal® CO-880. [Rhône-Poulenc Surf.; Rhône-Poulenc France] Nonoxynol-30; CAS 9016-45-9; nonionic; detergent, wetting agent, dispersant, emulsifier, for industrial cleaners, polyester resins, agric.; latex stabilizer; demulsifier for crude petrol. oil emulsions; also textile scouring, solubilizer; FDA, EPA compliance; pale yel. wax; aromatic odor; sol. in naphtha, xylene, butyl Cellosolve, perchloroethylene, ethanol, water; sp.gr. 1.08 (50°C); HLB 17.2; cloud pt. > 212 F (1% aq.); flash pt. > 200 F (PMCC); pour pt. 109 ± 2 F; surf. tens. 43 dynes/cm (0.01%); Ross-Miles foam 120 mm (0.1% aq., initial); toxicology: minimal eye irritant; LD50 (oral, rat) > 16 g/kg; 100% act.

- Igepal® CO-887. [Rhône-Poulenc Surf.; Rhône-Poulenc France] Nonoxynol-30; CAS 9016-45-9; nonionic; detergent, wetting agent, dispersant, emulsifier, for industrial cleaners, polyester resins; latex stabilizer; demulsifier for crude petrol. oil emulsions; also textile scouring, solubilizer; FDA, EPA compliance; pale yel. liq.; aromatic odor; sp.gr. 1.09; solid. pt. 28 F; HLB 17.2; cloud pt. clear at 212 F (1% aq.); flash pt. > 200 F (PMCC); pour pt. 34 ± 2 F; 70% act.

- Igepal® CO-890. [Rhône-Poulenc Surf.] Nonoxynol-40; CAS 9016-45-9; nonionic; emulsifier, stabilizer, wetting agent, dyeing assistant for plastics, agric., latexes, floor polishes, etc.; FDA, EPA compliance; off-wh. wax; aromatic odor; sol. in ethanol.

**Trademarks:** Ablunol NP6; Alkasurf® NP-6; Arkopal N060; Carsonon® N-6; Cedepal CO-530; Chemax NP-6; Dehydrophen PNP 4; Dehydrophen PNP 6; Desonic® 6N; Emulox® 6962; Emulgator U6; Ethal NP-6; Ethylan® 77; Etaphen 105; Heteroxida NP-6; Hostapal N-060; Hostapal N-060R; Hyonic NP-60; Iconol NP-6; Igepal® CO-530; Maccol® NP-6; Makon® 8; Marlophen® 86N; Marlophen® 86N(S); Naxonic NI-60; Nissan Nonion NS-205; Norfox® NP-6; NP-55-60; Poly-Tergent® B-200; Polystep® P-2; Prox-onic NP-06; Remcopal 666; Renex® 697; Rewopal® HV 6; Rexol 25/6; Sellig N 6 100; Sordox NNP 6; Siponic® NP-6 (see Igepal® CO-530); Surfonic® N-60; Sympersonic NP6; Syntopon A; T-Del® N-6; Tergitol® NP-6; Trycol® 6962; Trycol® NP-6

**Nonoxynol-7 (CTFA)**

CAS 9016-45-9 (generic); 26027-38-3 (generic); 27177-05-5; 37205-87-1 (generic); EINECS 248-292-0

**Synonyms:** PEG-7 nonyl phenyl ether; POE (7) nonyl phenyl ether

**Trademarks:** Desonic® 7N; Etaphen 107; Iconol NP-7; Makon® 7; Marlophen® 87N; Norfox® NP-7; Rexol 25/7; Sordox NNP 7; Sympersonic NP7; Tergitol® NP-7; Tergitol® NP-27; Trycol® 6963; Trycol® NP-7

**Nonoxynol-8 (CTFA)**

CAS 9016-45-9 (generic); 26027-38-3 (generic); 37205-87-1 (generic); 26571-11-9; 27177-05-5; EINECS 248-293-6; 247-816-5

**Synonyms:** PEG-8 nonyl phenyl ether; POE (8) nonyl phenyl ether; PEG 400 nonyl phenyl ether

**Trademarks:** Ablunol NP8; Alkasurf® NP-8; Arkopal N080; Carsonon® N-8; Cedepal CO-610; Dehydrophen PNP 8; Ethylan® TU; Etaphen 108; Hostapal N-080; Igepal® CO-610; Maccol® NP-8; Makon® 8; Marlophen® 88N; Nikkol NP-7.5; NP-55-80; NP-55-85; Nutrol 611; Polystep® P-3; Quimpol ENF 80; Remcopal 349; Renex® 688; Rewopal® HV 8; Rexol 25/8; Sellig N 8 100; Sordox NNP 8.5; Siponic® NP-8 (see Alkasurf® NP-8); Surfonic® N-85; Sympersonic NP8; Syntopon B; T-Del® N-8; Tergitol® NP-8; Teric N8

**Trademarks containing:** Surfonic® HDL.

**Nonoxynol-9 (CTFA)**

CAS 9016-45-9 (generic); 26027-38-3 (generic); 26571-11-9; 37205-87-1 (generic); 14409-72-4

**Synonyms:** PEG-9 nonyl phenyl ether; POE (9) nonyl phenyl ether; PEG 450 nonyl phenyl ether

**Trademarks:** Ablunol NP9; Akyporox NP 90; Alkasurf® NP-9; Arkopal N090; Caloxylate N-9; Carsonon® N-9; Cedepal CO-630; Chemax NP-9; Desonic® 9N; Emulox® 6962; Emulgator U9; Ethal NP-9; Ethylan® BCP; Ethylan® KEO; Etaphen 109; Gradonic N-95; Heteroxida NP-9; Hostapal N-090; Hyonic NP-90; Iconol NP-9; Igepal® CO-630; Igepal® FN-9.5 (formerly Texafor FN-9.5); Maccol® NP-9.5; Marlophen® 89N; Marlophen® 1028N; Norfox® NP-9; NP-55-90; Nutrol 600; Poly-Tergent® B-300; Prox-onic NP-09; Remcopal 29; Remcopal 6110; Renex® 698; Rewopal® HV 9; Rexol 25/9; Sellig N 9 100; Siponic® NP-9 (see Igepal® CO-630); Siponic® NP-9.5 (see Igepal® CO-630); Syn Fac® 905; Sympersonic NP9; Syntopon C; Tergitol® NP-9; Tergitol®

TP-9; Teric N9; Triton® N-101; Trycol® 6964; Trycol® NP-9

**Trademarks containing:** Mackanate DOS-70N

**Nonoxynol-10 (CTFA)**

CAS 9016-45-9 (generic); 26027-38-3 (generic); 27177-08-8; 37205-87-1 (generic); 27942-26-3; EINECS 248-294-1

**Synonyms:** PEG-10 nonyl phenyl ether; POE (10) nonyl phenyl ether; PEG 500 nonyl phenyl ether

**Trademarks:** Ablunol NP10; Akyporox NP 95; Akyporox NP 105; Alkasurf® NP-10; Arkopal N100; Carsonon® N-10; Cedepal CO-710; Chemax NP-10; Dehydrophen PNP 10; Detonic® 10N; Etaphen 110; Emulgin 285; Heteroxida NP-10; Hostapal N-100; Hyonic NP-100; Hyonic PE-100; Iconol NP-10; Igepal® CO-660; Igepal® CO-710; Lutensol® AP 10; Makon® 10; Marlophen® 810N; Naxonic NI-100; Nikkol NP-10; Poly-Tergent® B-315; Polystep® F-4; Prox-onic NP-010; Renex® 690; Rewopal® HV 10; Rexol 25/10; Sellig N 10 100; Sordox NNP 10; Simulcol 1030 NP; Siponic® NP-10 (see Igepal® CO-660); Surfonic® N-95; Surfonic® N-100; Surfonic® N-102; Sympersonic NP10; Syntopon D; T-Del® N-9.5; Tergitol® NP-10; Tergitol® NPX; Teric N10; Trycol® 6974; Witconol NP-100

**Trademarks containing:** Surfonic® HDL-1

**Nonoxynol-11 (CTFA)**

CAS 9016-45-9 (generic); 26027-38-3 (generic); 37205-87-1 (generic)

**Synonyms:** PEG-11 nonyl phenyl ether; POE (11) nonyl phenyl ether

**Trademarks:** Alkasurf® NP-11; Arkopal N110; Carsonon® N-11; Desonic® 11N; Hostapal N-110; Hyonic NP-110; Igepal® FN-11 (formerly Texafor FN-11); Maccol® NP-11; Makon® 11; Neutroxy® 656; Norfox® NP-11; Nutrol 656; Poly-Tergent® B-350; Remcopal PQNP; Rexol 25/11; Sellig N 11 100; Sordox NNP 11; T-Del® N-10.5; Teric N11; Triton® N-111; Trycol® 6965; Trycol® NP-11

**Nonoxynol-12 (CTFA)**

CAS 9016-45-9 (generic); 26027-38-3 (generic); 37205-87-1 (generic)

**Synonyms:** PEG-12 nonyl phenyl ether; POE (12) nonyl phenyl ether; PEG 600 nonyl phenyl ether

**Trademarks:** Ablunol NP12; Alkasurf® NP-12; Carsonon® N-12; Dehydrophen PNP 12; Desonic® 12N; Emulgator U12; Ethylan® DP; Etaphen 112; Heteroxida NP-12; Hyonic NP-120; Iconol NP-12; Igepal® CO-720; Maccol® NP-12; Makon® 12; Marlophen® 812N; Nissan Nonion NS-212; Polystep® F-5; Remcopal 3712; Renex® 692; Sellig N 12 100; Sordox NNP 12; Sermul EN 229; Surfonic® N-120; Sympersonic NP12; T-Del® N-12; Teric N12; Trycol® 6963

**Nonoxynol-13 (CTFA)**

CAS 9016-45-9 (generic); 26027-38-3 (generic); 37205-87-1 (generic)

**Synonyms:** PEG-13 nonyl phenyl ether; POE (13) nonyl phenyl ether

**Trademarks:** Arkopal N130; Desonic® 13N; Hostapal N-130; Remcopal 3515; Renex® 679; Sordox NNP 13; Siponic® NP-13 (see Igepal® CO-720); Surfonic® N-130; Sympersonic NP13; Syntopon E; Tergitol® NP-13; Teric N13;